

What is claimed is:

1. A light source driving circuit comprising:

a power supply section;

a light source section;

5 a charging section for storing an electric charge provided from said power supply section; a switching section for connecting said charging section to said power supply section or to said light source section; and

10 a control section for controlling said switching section so as to connect said charging section to said power supply section, thereby charging said charging section, and so as to disconnect said charging section from said power supply section and connect said charging section to said light source section, thereby causing said light source section to emit light.

15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000 1005 1010 1015 1020 1025 1030 1035 1040 1045 1050 1055 1060 1065 1070 1075 1080 1085 1090 1095 1100 1105 1110 1115 1120 1125 1130 1135 1140 1145 1150 1155 1160 1165 1170 1175 1180 1185 1190 1195 1200 1205 1210 1215 1220 1225 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claim 4, wherein said power supply section includes a constant-current circuit, and wherein

said power supply section charges said charging section via said constant-current circuit.

5 6. The light source driving circuit according to claim 5, wherein said charging section includes a driving capacitor.

10 7. The light source driving circuit according to claim 6, wherein said light source section includes a light-emitting diode.

15 8. The light source driving circuit according to claim 1, wherein said light source section includes a first light source for emitting first color light, a second light source for emitting second color light, and a third light source for emitting third color light.

20 9. The light source driving circuit according to claim 8, wherein said switching section includes a first switch, a second switch, a third switch, and a fourth switch, and wherein

25 said power supply section is connected to said charging section via said first switch, said first light source is connected to said charging section via said second switch, said second light source is connected to said charging section via said third switch, and said third light source is connected to said charging section via said fourth switch.

30 10. The light source driving circuit according to claim 9, wherein said first switch, said second switch, said third switch, and said fourth switch each have a control terminal, and wherein

35 said first switch, said second switch, said third switch, and said fourth switch are controlled so as to conduct cyclically and in an alternating drive by a control signal that said control section applies to said each control terminal.

11. The light source driving circuit according to claim 10, wherein said power supply section includes a

constant-current circuit, and wherein

said power supply section charges said charging section via said constant-current circuit.

12. The light source driving circuit according to
5 claim 1, wherein said light source section includes a first light source for emitting first color light, a second light source for emitting second color light, and a third light source for emitting third color light, and
said charging section includes a first
10 driving capacitor corresponding to said first light source, a second driving capacitor corresponding to said second light source, and a third driving capacitor corresponding to said third light source.

13. The light source driving circuit according to
15 claim 12, wherein said switching section includes a first switch, a second switch, a third switch, a fourth switch, a fifth switch, and a sixth switch, and wherein

20 said power supply is connected to said first driving capacitor via said first switch, said power supply is connected to said second driving capacitor via said second switch, said power supply is connected to said third driving capacitor via said third switch, said first light source is connected to said first driving capacitor via said fourth switch, said second light
25 source is connected to said second driving capacitor via said fifth switch, and said third light source is connected to said third driving capacitor via said sixth switch.

14. The light source driving circuit according to
30 claim 13, wherein said first switch, said second switch, said third switch, said fourth switch, said fifth switch, and said sixth switch each have a control terminal, and wherein

35 said first switch, said second switch, said third switch, said fourth switch, said fifth switch, and said sixth switch are controlled so as to conduct cyclically and in an alternating drive by a control

signal that said control section applies to said each control terminal.

15. The light source driving circuit according to claim 14, wherein said power supply section includes a
5 constant-current circuit, and wherein

said power supply section charges said first driving capacitor, said second driving capacitor, and said third driving capacitor via said constant-current circuit.

10 16. A lighting apparatus which uses a light source driving circuit according to claim 8.

17. A display apparatus which uses a light source driving circuit according to claim 8.

15 18. A field sequential color liquid crystal display apparatus which uses a light source driving circuit according to claim 8.

19. An information appliance which uses a light source driving circuit according to claim 8.